

# Work Order ID 61151



Page 1

Tuesday, August 10, 2010 8:38:57 AM

Item ID: D350-591-312

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 9/15/2010 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: mf Date: 10-8-10

Tooling:

Date:

Run Start



QC: Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3272

Rev B

100



DC

Document Control

DOCUMENT CONTROL

0.00

Memo

0.00

Photocopy bluefile and type labels as per PPP D350-591-312 CHG001

*8/10/2010*

*Refer BG 10-9-20*

110



Large Fab

Large Fab

Large Fab

0.00

Memo

0.00

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod

*M112360*  
*M114877*

3-Grind End Plate flush

*8/10/09.01*

*10 p*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Work Order ID 61151**

Tuesday, August 10, 2010 8:38:57 AM

Page 2

Item ID: D350-591-312

Accept

Setup Start

Revision ID:

Stop

Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010 Start Qty: 10.00

Cust Item ID:

Required Date: 9/15/2010 Req'd Qty: 10.00

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

\* 10 - BE 10/09/07

130

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

S 10/09/07



LM

140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

K 10.09.07

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 61151**

Tuesday, August 10, 2010 8:38:57 AM



Page 3

Item ID: D350-591-312

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 9/15/2010 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

OK 10-9-7 (10)

180

Large Fab

0.00



Large Fab

Memo

0.00

Large Fab

10-08-15

10 4

1-Assemble Leg Assembly as per Dwg D3272.

2-Leave one rivet out until welding is complete.

3-Bevel Aft end for welding

4-Inspect for foreign object as per QSI 024

5-Weld Aft End Plate as per QSI 004 & Dwg D3272  
A/R ☐ Aluminum Rod ☒ 1112860

6-Grind End Plate flush

7-Install last rivet as per Dwg.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 61151

Tuesday, August 10, 2010 8:38:57 AM



Page 4

Item ID: D350-591-312

Accept



Setup Start



Revision ID:

Item Name: Heli-Access-Step, Long RH

Stop



Start Date: 8/11/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 9/15/2010 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



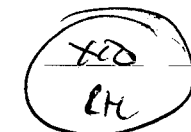
Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190  QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds  Memo	0.00  0.00							
200  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00  0.00							
210  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00  0.00							

10 - JE 10/09/15

8.10.09.15



=> H

10/09/16

10.14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 61151

Tuesday, August 10, 2010 8:38:57 AM



Page 5

Item ID: D350-591-312

Accept



Setup Start



Revision ID:

Item Name: Heli-Access-Step, Long RH

Stop



Start Date: 8/11/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 9/15/2010 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M 1/14841</i> Memo START TIME: <i>1:05</i> OVEN TEMPERATURE: <i>3200</i> FINISH TIME: <i>1:35</i>	0.00 <i>BR 10-9-16.</i> 0.00				<i>(10) /</i>			
230  HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <i>M 115078</i> Memo	0.00 <i>M 10/09/17</i> 0.00				<i>X 10 RH /</i>			
240  QC Quality Control	QC3- Inspect Part Finish Memo	0.00 <i>Siolorb</i> 0.00				<i>X 10 RH</i>			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 61151**

Tuesday, August 10, 2010 8:38:57 AM

Page 6

Item ID: D350-591-312

Accept

Setup Start

Revision ID:

Stop

Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010 Start Qty: 10.00

Cust Item ID:

Required Date: 9/15/2010 Req'd Qty: 10.00

Customer:




Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250  Packaging	Pick Kit	0.00							
Packaging	Memo	0.00							
260  QC	QC4- 100% Inspect kits for completeness	0.00							
Quality Control	Memo	0.00							
270  Packaging	Packaging	0.00							
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-591-312 Location: _____								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 61151**

Tuesday, August 10, 2010 8:38:57 AM

Page 7



Item ID: D350-591-312

Accept



Setup Start



Revision ID:

Stop



Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 9/15/2010 Req'd Qty: 10.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

280

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/09/21 *[Signature]*  
MR  
10-9-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries




• Tuesday, August 10, 2010 8:38:57 AM

**Author's address:** Department of Psychology, University of Cambridge, 7 West Road, Cambridge CB3 9ET, UK.  
E-mail: [m.j.harris@cam.ac.uk](mailto:m.j.harris@cam.ac.uk)



**Required Qty: 10.00**

**Comments:** IPP Rev:A 04.03.22 New issue KJ/RF  
 IPP Rev:B 07-06-09 Added D3572-1 JLM  
 IPP Rev:C 08-04-02 ECN1163 DD verified by:EC  
 IPP Rev:D 08-04-08 ECN1164 DD verified by:eC IPP Rev:D  
 fixe route seq in bom DD 10.04.28 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3-35A  Bolt		Purchased	No			250	Each	113.0000	2	20		10/9/17	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST353		113							
				115016		13							
				115108		100							
AN4-13A  Bolt		Purchased	No			250	Each	894.0000	8	80		10/9/17	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST357		394							
				115108		394							
				ST358		500							
				115159		500							
AN5-36A  Bolt		Purchased	No			250	Each	173.0000	2	20		10/9/17	102
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST341		173							
				114292		5							
				114941		168							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Tuesday, August 10, 2010 8:38:57 AM

Work Order ID: 61151

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010

Required Date: 9/15/2010

Start Qty: 10.00

Required Qty: 10.00

AN960JD10 NAS1149D0363J Purchased No

250 Each

6.0000 4 40



M115622 10/9/178

Location

Loc Qty

Loc Code

ST

6

107715

6

AN960JD416 NAS1149D0463J Purchased No

250 Each

0.0000 16 160



M115000 10/9/178

AN960JD516 NAS1149D0563J Purchased No

250 Each

34.0000 4 40



M114752 10/9/178

Location

Loc Qty

Loc Code

ST

34

103694

18

107534

12

109287

4

D2230-3 Manufactured No

250 Each

109.0000 4 40



B61198 10/9/178  
(102)

Location

Loc Qty

Loc Code

ST476

109

55452

2

59418

8

60191

99

3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, August 10, 2010 8:38:57 AM

Page 3

Work Order ID: 61151

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010

Required Date: 9/15/2010

Start Qty: 10.00

Required Qty: 10.00

D2618 Manufactured No

250 Each

189.0000 2 20



Pushing



8/19/17 SP

Location

Loc Qty

Loc Code

ST019

187

60193

73

60772

114

ST020

2

56892

1

57829

1

D2856-400 Manufactured No

250 f

340.9788 0.6



Abraison Strip



6/10/17 SP

Location

Loc Qty

Loc Code

ST403

340.9788421

56626

124.978842

59920

216

D3065-041 Manufactured No

180 Each

6.0000 1 10



Step Leg Assembly Hi



8/10.09.15

Location

Loc Qty

Loc Code

WA

860200

6

58536

4

59678

2

D3066-1 Manufactured No

180 Each

89.0000 2 20



Spacer



8/10.09.15

Location

Loc Qty

Loc Code

WA

360194

89

58540

23

60194

66



11/9

Tuesday, August 10, 2010 8:38:57 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, August 10, 2010 8:38:57 AM

Page 4

Work Order ID: 61151

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010

Required Date: 9/15/2010

Start Qty: 10.00

Required Qty: 10.00

D3067-1  
End Plate  
Manufactured No 110 Each 132.0000 1 10

Location	Loc Qty	Loc Code
WA	132	
60141	132	

10.08.31

D3067-1  
End Plate  
Manufactured No 180 Each 132.0000 1 10

Location	Loc Qty	Loc Code
WA	132	
60141	132	

10.08.13

D3219-1  
Plate  
Manufactured No 180 Each 27.0000 2 20

Location	Loc Qty	Loc Code
WA	27	
360859	27	
59597		

10.08.31

S 710 D3235-1  
Mounting Lug  
Manufactured No 250 Each 93.0000 2 20

Location	Loc Qty	Loc Code
ST471	93	
59125	13	
60195	40	
60490	40	

10/9/17

D3272-1  
Step  
Manufactured No 110 Each 0.0000 1 10

361147 10.08.31

Tuesday, August 10, 2010 8:38:57 AM

Shop Packet Print

Page 4

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, August 10, 2010 8:38:57 AM

Work Order ID: 61151

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010

Required Date: 9/15/2010

Start Qty: 10.00

Required Qty: 10.00

D3278-041 Manufactured No

250 Each

55.0000

1

10



Support Assembly

Location

Loc Qty

Loc Code

ST471

55

59633

15

60201

40

180

Each

179.0000

16

160

MS20600-AD4W4

Purchased

No



Rivets

Location

Loc Qty

Loc Code

ST321

179

113368

62

114181

11

114718

2

114935

104

250

Each

2,426.000

2

20

MS21042L3

Purchased

No



Nut

Location

Loc Qty

Loc Code

ST300

2426

114523

115

114718

311

114784

2000

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Page 6

Tuesday, August 10, 2010 8:38:57 AM

Work Order ID: 61151

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 8/11/2010

Required Date: 9/15/2010

Start Qty: 10.00

Required Qty: 10.00

MS21042L4

Purchased

No

250

Each

3,263.000

8

80



10/9/17 SL

Location

Loc Qty

Loc Code

ST300

3263

113422

68

114523

28

114718

16

114784

1151

115108

2000

3  
17

MS21042L5

Purchased

No

250

Each

738.0000

2

20



10/9/17 SL

Location

Loc Qty

Loc Code

ST139

238

114813

238

ST300

500

115156

500

20

Tuesday, August 10, 2010 8:38:57 AM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN <i>QP</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

RELEASED

07.06.04 *[Signature]*

#61151

B

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

**GENERAL NOTES:**

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

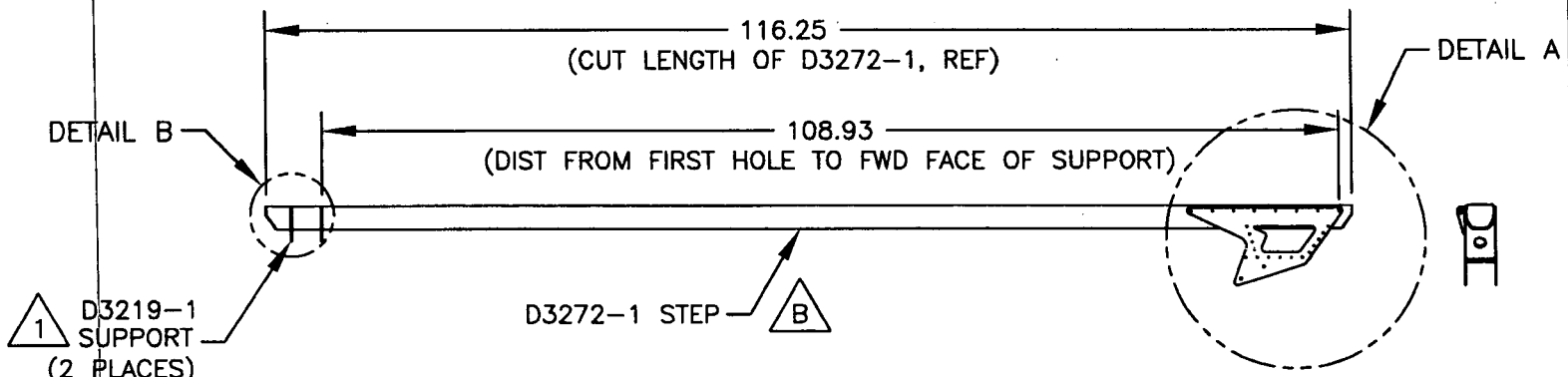
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

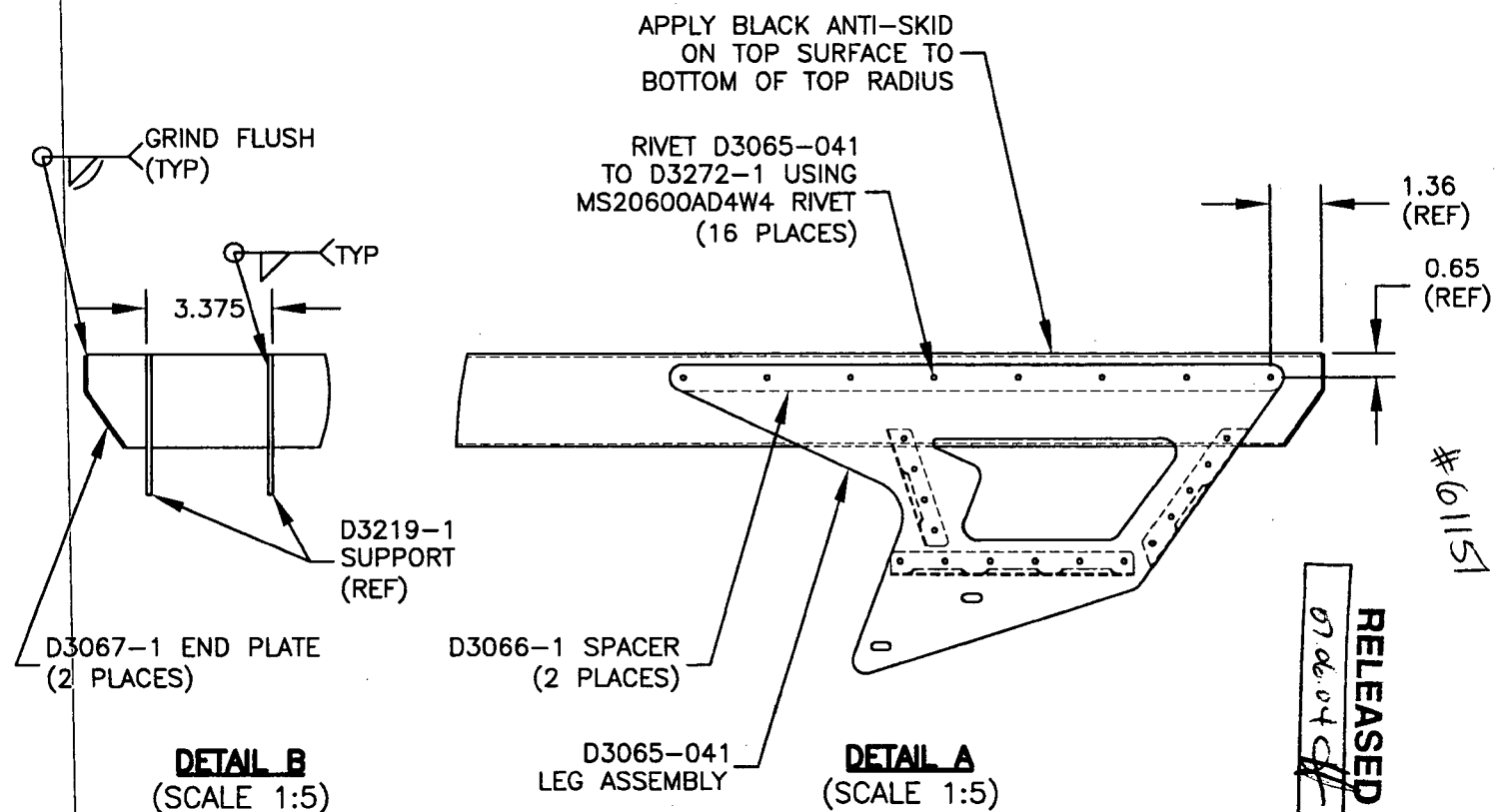
**NOTE:** Date & initial all entries

**DART**

DESIGN	Q	DRAWN BY	JR	DART AEROSPACE LTD
CHECKED	CE	APPROVED	JE	HAWKESBURY, ONTARIO, CANADA
DATE	07.05.18	DRAWING NO.	D3272	REV. B
		TITLE	STEP ASSEMBLY, HI LONG	SHEET 2 OF 3
		SCALE	1:20	



**D3272-041 STEP ASSEMBLY (LH. SHOWN)**  
**D3272-042 STEP ASSEMBLY (RH, OPPOSITE)**



THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Copyright © 2004 by DART AEROSPACE LTD

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

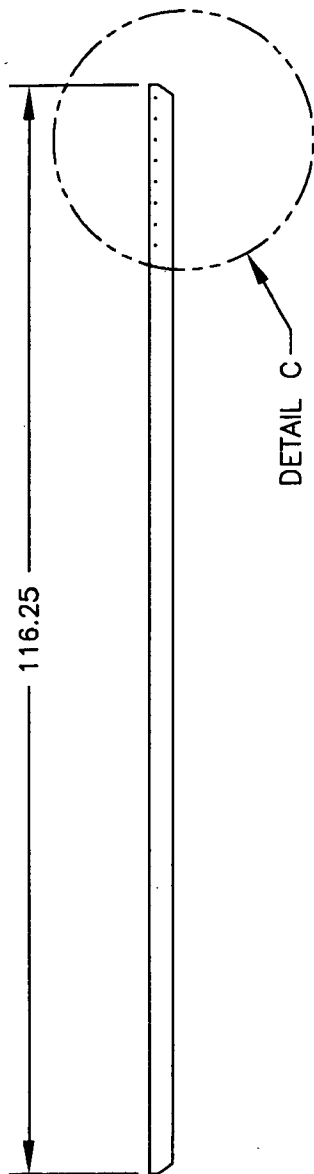
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

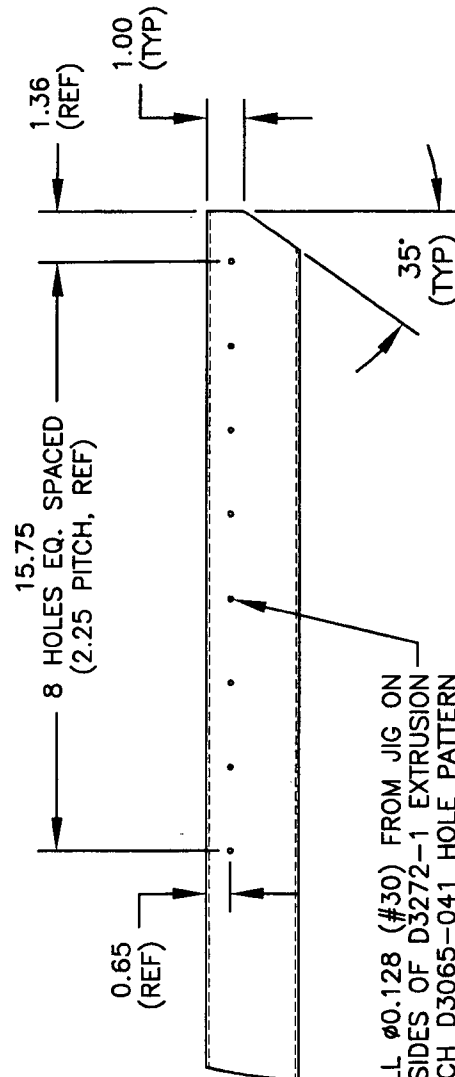


DESIGN 9P	DRAWN BY B	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED H	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20



DETAIL C

**B D3272-1 STEP**  
(MAKE FROM D2622-120 STEP EXTRUSION)



**DETAIL C**  
(SCALE 1:5)

RELEASED

07.06.04

#61151

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	<i>Heli-Access-Step</i> ™, Long Step – High Skid, LH
	X							D350-591-212	<i>Heli-Access-Step</i> ™, Long Step – High Skid, RH
		X						D350-591-213	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
			X					D350-591-214	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
				X				D350-591-215	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
					X			D350-591-216	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
						X		D350-591-311	<i>Heli-Access-Step</i> ™, Long Step – High Skid, LH
							X	D350-591-312	<i>Heli-Access-Step</i> ™, Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
	1							D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
		1						D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
			1					D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
				1				D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
					1			D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
						1		D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
							1	D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
		2	2	2	2			D2230-1	MOUNTING LUG
		2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8							D2274	RADIUS BLOCK
						2	2	D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

\*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.